

REMARKS

Claims 1, 3-14 and 19-24 are pending in the application. Favorable reconsideration of the application is respectfully requested.

Claim rejections - 35 U.S.C. Section 103

1. Claims 1, 3-11, 19-20, 22 and 24 stand rejected under 35 U.S.C. Section 103(a) as being unpatentable over Laverty et al., U.S. Pat. No. 5,508,510 ("Laverty I"), in view of U.S. Pat. No 5,903,373 to Jeffrey Welch et al. ("Welch"). Applicants traverse the rejections because the references are taken from very different fields and there is insufficient rationale for combining the references. Even with the improperly combined references, the prior art cited does not teach or suggest all the limitations of the claims.

The references are from non-analogous arts

Laverty I is classified in U.S. Pat. Class 250, for radiant energy devices. Welch is classed in U.S. Pat. Class 359 for optical systems and elements. Thus the references are non-analogous art with respect to each other and may not be properly combined.

M.P.E.P. 2141.01(a), stating that in order to rely on a reference under 35 U.S.C. Section 103(a), it must be analogous prior art. Since the two references are taken from very different fields, the rejection is improper.

There is insufficient motivation for combining the disparate references

Even if the improperly-combined references are used, there is insufficient rationale advanced in the Office Action for the combination. The rationale for combining

references is that one would be motivated to design the remote control device as a hand-held device, as taught by Welch in the system of Lavery I "because a hand-held device can be easily carried and used." See Office Action, p. 3, lines 5-8. At best, this is circular reasoning, in which the Applicants' invention is being used against them. By this reasoning, everything should be hand-held, "because a hand-held device can be easily carried and used." In fact, Welch teaches a plurality of portable computers and a fixed central controller. Applying the hand-held convenience of Welch to Lavery could just as well mean portable, hand-held water-faucets that are serviced by infrared links to a fixed central controller.

The rejection gives no hint as to what would have motivated the person faced with the problem the present Inventors set out to solve, and with knowledge of Lavery I, to look to Welch for a solution. The problem solved by the present inventors is set out in paragraphs [0003] to [0012] of the present application. The problems include reliable communications between the controllers for devices that dispense fluids (such as hand activated water faucets), and devices for management of the controllers, including diagnostics, maintenance, calibration and servicing. The problem Welch sets out to solve is the location of portable, hand-held, battery-powered computers in a hall or auditorium. See Welch, col. 3, lines 38-41 and col. 4, lines 10-13. The fact that the computers are portable or hand-held is the problem, not the solution. One would not be motivated to look to Welch to solve the problem the present Inventors set out to solve. Accordingly, there is insufficient motivation for combining the references.

The improperly combined references do not teach/suggest all the limitations of the claims

Lavery I teaches a fixed device, such as a water faucet, communicating via infrared/optical means and serviced by a remote device. Welch teaches a plurality of portable, hand-held, battery-powered computers whose location is detected by a (fixed) central station once IR transceivers are installed on the computers, as shown in Fig. 1. The central station 12 communicates to an IR transceiver 16 via a hard-wired link 18, in which the IR transceiver 16 may be a number of transceivers connected by the hard-wired link. The individual stations 14 communicate to the IR transceivers 16 via infrared.

In other words, Welch teaches a fixed central computer communicating with a number of remote, portable (hand-held) devices, while Lavery I teaches a number of remote, presumably-fixed water faucets, each with a computer, and serviced by a portable computer. Both Welch and Lavery thus teach a plurality of remote devices, while Welch teaches a fixed controller and Lavery teaches a portable controller. Applying Welch to Lavery would result in hard-wiring each of the remote water faucets to a central computer or hard wiring an IR transceiver for each device to the central computer.

Thus, the combination of references does not teach or suggest the claims of the present invention. Claims 1, 3 and 4 are thus patentable, as are claims depending from them, claims 5-11, 19-20, 22 and 24.

ii. Many limitations of the dependent claims also are not taught or suggested in the references. In addition, several of the dependent claims recite limitations that are not taught or suggested in the references. For example, the Claim 23 limitation of the

duration of the attention signal is not taught or suggested in Lange. The passage cited in the Office Action, col. 4, lines 50-51, simply states that the timing of different pulses, a pulse table, may be stored in a pulse table control circuit. There is no disclosure of an attention signal, and no disclosure that the attention signal should have a greater duration than a normal pulse signal. Accordingly, at least Claim 23 is allowable for this additional reason.

2. Claims 1, 4, 7-11, 13 and 23 are rejected under 35 U.S.C. Section 103(a) as being unpatentable over Lange et al., U.S. Patent No. 4,916,613 ("Lange") in view of Laverty, Jr. et al., U.S. Patent No. 5,769,120 ("Laverty II"). As admitted in the Office Action, p. 4, lines 15-17, Lange does not teach the use of a handheld device. Lange teaches only the use of infrared transmitters and receivers. Lange does not teach or suggest that the second device is so much as portable. In other words, in Lange, the control unit may very well be in an electronics shop, with the remote units being programmed in the shop before installation at their place of use. Lange teaches that the remote units (at a sink, for instance) are in communication with a control unit for determining the state of the battery at the remote unit, which battery is checked after the approach of every user. See col. 2, lines 3-26. Lange thus teaches only that the state of the battery is continually checked, not that the remote devices may be programmed by a portable control device.

The Office Action then cites Laverty II, Fig. 13, as teaching a handheld device, and states that one would be motivated to combine Laverty II with Lange because a

handheld device can be carried by an operator to interrogate rinsing systems. Office Action, pp. 4-5. Lavery II, however, does not teach a handheld device, but only a "remote control device," as seen in Fig. 13 and on the front cover of Lavery. See also the only relevant text at col. 3, lines 32-34, stating that Fig. 13 discloses a "portable" remote control device, not a handheld one. A text search of Lavery II shows that Lavery does not include the word "handheld." Thus, the references do not teach or suggest all the limitations of the claims and the Office Action fails to make out a prima facie case of obviousness against at least Claims 1 and 4. Claims 7-11, 13 and 23, depend from Claim 1, are allowable at least because they depend from Claim 1.

3. Claims 12 and 21 stand rejected under 35 U.S.C. Section 103(a) as being unpatentable over U.S. Pat. No. 5,508,510 to Lavery et al. ("Lavery I"), in view of U.S. Pat. No. 5,903,373 to Jeffrey Welch et al. ("Welch"), and further in view of U.S. Pat. No. 6,125,482 to Frank Foster ("Foster"). The rejection states that Foster teaches a cable to transmit data, not an infrared link, but that it is "well known in the art that any communication link, including infrared wireless link, can be used for such transferring." See Office Action, p. 5, lines 18-20.

Claims 12 and 21 are dependent upon Claim 1 which distinguishes over Lavery I and Welch for the reasons given above. Foster discloses transmitting past operation data over a hard communication link, namely a cable, and thus does not cure the deficiency of Lavery I and Welch in making obvious the invention of Claims 1, 12 and 21. Foster's

cable actually teaches away from the use of a hand-held device, since calibration or adjustment may take place via communication with the cable without the need for a portable or a hand-held device. Therefore, Claim 12 is not obvious in view of Lavery I, Welch, and Foster, and is patentable.

As noted above in the response to the rejection of Claim 1 over Lavery I and Welch, the combination of references is improper, and even the improper combination does not teach or suggest all the limitations of the claims. Applicants traverse this rejection of Claim 12. Whether or not infrared wireless links are well known, there must be some teaching, suggestion or motivation for combining references to arrive at a rejection. See M.P.E.P. 2143.01. Applicants request the Examiner to supply a reference for this particular teaching, as well as a reason for the combination. The rejection itself admits that the references do not teach or suggest all the limitations of the claims. Thus, the rejection of at least Claim 12 is admittedly improper.

Claim 21 is allowable at least because it depends from allowable Claim 1.

4. Claim 14 stands rejected under 35 U.S.C. Section 103(a) as being unpatentable over Lavery I and Welch, in view of admitted prior art. Claim 14 is allowable at least because it depends from allowable Claim 1.

5. Claim 23 stands rejected under 35 U.S.C. Section 103(a) as being unpatentable over Lavery I and Lange, and further in view of U.S. Pat. No. 7,106,174 to George Powell ("Powell"). As noted above, Lavery I and Lange do not teach all the limitations of the Claims 1 and 4. Accordingly, Claim 23 is allowable at least because it depends from Claim 1.

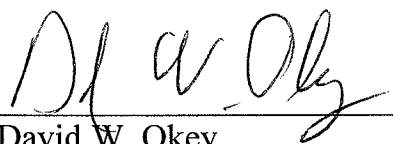
Summary

In summary, Claims 1, 3-14 and 19-24 are believed to be allowable for all of the reasons given above. These claims remain pending and are in condition for allowance. Applicants respectfully request entry of the present Amendment and reconsideration of the application, with an early and favorable decision being solicited. Should the Examiner believe that prosecution of the application could be expedited, the Examiner is requested to call Applicants' undersigned attorney at the number listed below.

Respectfully submitted:

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